

OGG: REPORT ON TOBACCO

## Report on Tobacco

By C. L. OGG (Eastern Utilization Research and Development Division, Agricultural Research Service, U.S. Department of Agriculture, 600 E. Mermaid Lane, Philadelphia, Pa. 19118)

Methods for particulate matter and alkaloids as nicotine in cigarette smoke were reported last year but were not recommended for adoption as official methods because no satisfactory procedure was available for determining the water adsorbed on the filter used to trap the particulate matter. The Analytical Methods Committee of the Tobacco Chemists Research Conference, the organization cooperating in the study of tobacco methods, has been examining moisture methods applicable to smoke analysis, i.e., gas chromatographic and Karl Fischer titration procedures. Although gas chromatography appears to be the method of choice because moisture, particulate matter, and alkaloids can all be determined on the same sample, time did not permit a collaborative test of the procedure this year.

Data have been obtained on the determination of moisture in tobacco but unforeseen circumstances prevented their being worked into a report for the 1964 meeting.

Because of the poor results obtained for potassium and calcium in the synthetic test solution analyzed last year, the members of the Analytical Methods Committee, Tobacco Chemists Research Conference, felt that work on the flame photometric method for these elements should be dropped for the present. Atomic absorption procedures for potassium and calcium appear to hold greater promise

than flame photometric methods; however, too few of the collaborators have atomic absorption equipment at present to permit a reliable collaborative study.

Two studies of the method for petroleum ether extractables have been made without arriving at a satisfactory procedure. There is a possibility that a new measure of the quality of tobacco may replace the petroleum ether extractables value which is generally used only in conjunction with other analytical data. If the Analytical Methods Committee, TCRC, deems this new procedure worthy of collaborative test it is proposed that such a study be made, otherwise the study of petroleum ether extractables should be continued.

### Recommendations

It is recommended—

(1) That study of methods for cigarette smoke analysis be continued and extended to include moisture in the trapped smoke.

(2) That work be continued on methods for determining moisture in tobacco, and for the determination of petroleum ether extractables or a substitute method.

(3) That studies of methods for potassium and calcium in tobacco be discontinued until enough laboratories have atomic absorption equipment to make collaborative testing with this method feasible.

## Report on AOAC Methods for Vitamins and Other Nutrients

By EDWIN L. HOVE (Division of Nutrition, Food and Drug Administration, Washington, D.C. 20204)

In recent editions of the AOAC *Official Methods of Analysis*, Chapter 39 has been entitled "Nutritional Adjuncts." The title "Nutritional Adjuncts" was first used in the

8th edition of 1955 when there was interest in the growth-promoting properties of antibiotics, arsenicals, and various substances added, or proposed for addition, to diets for